- 52. Pachydiplax longipennis (Burm.). June 7 to Aug. 6. Several specimens.
- 53. Leucorrhinia frigida Hagen. June to Aug. 11. Several specimens. This is the most southern station for this northern species.
- 54. Leucorrhinia intacta Hagen. June 9. Several specimens.
- 55. Celithemis elisa (Hagen). July 26 to Aug. 11. Several specimens.
- 56. Celithemis eponina (Drury). July 8 to Aug. 16. Several specimens.
- 57. Celithemis monomelæana Will. July 8 to Aug. 14. Several specimens. This is the most northern and second New England record and station for this rare southern species.
- 58. Celithemis ornata Ramb. July 2 to Aug. 14. Several specimens.
- 59. Pantala flavescens (Fabr.). Aug. 9. One specimen.
- 60. Tramea carolina (Linn.). June to July 30. Several specimens.

NOTE ON THE GENUS LIOBRACON, WITH THE DESCRIPTION OF A NEW SPECIES (HYMEN-OPTERA; BRACONIDÆ).

By Charles T. Brues,

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In a small collection of Parasitic Hymenoptera collected in Hayti several years ago by Dr. William M. Mann, I have found several specimens of the insect described by Cresson as *Bracon distinctus* in his "Hymenoptera of Cuba." This proves to belong to the genus Liobracon Szépligeti, to which several South American species have hitherto been referred. In addition there is a second species taken by Dr. Mann which is described below.

Liobracon Szépligeti.

Termes Füzetek, Vol. 24, p. 361. (1901.) Gen. Ins., fasc. 22, p. 66. (1904.) Type *L. macula* Brullé (*singularis* Szép). The species may be distinguished as follows:

1. Wings fuscous or black	3
Wings flavous, marked with black	2
2. Wings with two black bandsgeniculatus Bru	
Apical half of wing black partitus Enderl	ein
3. Stigma black	3
Stigma yellow; legs red and black; scutellum bifoveate at base	
4. Pronotum and propleura smooth; thorax and middle of h	ind
femora red; scutellum bifoveate at basecressonii D.	T.
Pronotum and most of propleura rugose-reticulate; thorax a	ind
legs entirely black; scutellum with a crenate furrow	at
basemanni sp. n	ov.
5. Antennal flagellum black; second suture of abdomen wea	kly
crenulatemacula Bru	ıllé
Antennal flagellum dark red; second suture smooth	
ruficornis Ca	m.

Liobracon manni sp. nov.

Q. Length 9 mm. Ovipositor nearly as long as the abdomen. Black, including the wings entirely; abdomen bright red; body clothed with long and very sparse white hairs. Head as thick as broad, distinctly, but not strongly margined behind; eyes prominent, temples broad, widened behind the eyes. Front impressed, the depression extending around the ocellar tubercle, with a median carina between and just above the antennæ, but without punctures. Head above smooth and shining; face rugose-reticulate at the sides, rugose below, with an elongate median smooth tubercle. Malar space half the height of the eye, without furrow; head behind with a few very fine punctures. Antennæ as long as the body; scape twice as long as thick, not noticeably swollen; flagellar joints all nearly three times as long as thick, first not noticeably longer than the second, following three or four scarcely decreasing in length. Pronotum rugose-reticulate with a transverse groove at the extreme posterior margin. Mesonotum smooth and polished except for a few coarse punctures medially behind; parapsidal furrows smooth, very deep, the median lobe strongly elevated anteriorly with its surface rising vertically behind the prothorax. Scutellum smooth, flat, at the base with a broad furrow composed of eight elongate foveæ. Propodeum covered with scattered round impressions; these are well-separated, of about equal size, each somewhat smaller than

one of the ocelli; medially with two closely approximate, punctate, grooved lines. Prosternum with sparse, rather large punctures; mesosternum smooth. Propleura closely, irregularly punctate below, above which is a coarsely, transversely, striate impression; upper angle with some irregular, coarse sculpture. Mesopleura smooth, convex, except for a furrow next the tegula, a broader one not far below the first and a deep foveate impression at the middle just before the posterior edge. Metapleura with scattered, setigerous punctures; spiracle small, nearly round; subspiracular groove very finely impressed. Abdomen as long as the thorax, subacute at tip and much swollen at the middle; first segment with four short carinæ at base, the lateral ones close to the margin, its surface with a few poorly impressed large punctures, more noticeable laterally; median portion nearly flat; second and following segments entirely smooth; second with its middle portion, defined by a punctate line, broadly transversely oval, more than twice as wide as long; from the side of this an oblique punctate furrow extends backward to the margin and another one directly forward, these defining a large side piece and a small triangular depressed area at the anterior edge between the sidepiece and the central oval space; corners of following segments not distinctly separated; hind margin of third segment weakly sinuate. Legs very stout; middle and hind tarsi no longer than their tibiæ; tibial spurs very short; claws simple; front tibiæ with a row of stout spinules on the front side. Radial cell ending considerably before the wing tip, third section of radius nearly twice as long as the other two together; second more than twice as long as the first and scarcely longer than the second transverse cubitus; submedian cell longer than the median by nearly the length of the nervulus which is very slightly oblique; parallel vein originating at the lower corner of the third discoidal cell; recurrent nervure entering the first cubital cell far before the apex; second cubital with almost parallel sides and weakly narrowed above. Radial cell of hind wing without indication of a cross-vein, the discoidal vein (originating at the lower end of the basal vein) not transverse except at base, sharply bent and extending toward the apex of the wing.

Type from St. Marc, Hayti.

Although very similar to *L. cressonii*, this species differs noticeably in the sculptured pronotum and punctate furrows on the sec-

ond abdominal segment, as well as in the plainly undivided radial cell and curved discoidal vein in the hind wing.

Liobracon cressonii D. T.

Cresson, Proc. Ent. Soc. Philadelphia, Vol. 4, p. 75. (1865.) (Bracon distinctus.)

Dalla Torre, Cat. Hym., Vol. 4, p. 264. (1898.) (Bracon cressonii.)

Dr. Mann took this species in Hayti at Cape Haytien, Grand Rivière and St. Marc.

SOME OBSERVATIONS ON THE WEBBING CLOTHES MOTH (TINEOLA BISELLIELLA HUM.).1

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Two larvæ, 7 and 11 mm. long, respectively, discovered working in the writer's overcoat October 25, 1917, were placed in a glass jar lined, except at the top, with a layer of gray felt, and placed in his sleeping room where his clothes-closet was located, for rearing and observation. The room was then receiving, and continued to do so until well into April, some furnace heat during the day, but was quite cool during the night and early forenoon, when it was freely ventilated. Owing to the writer's regular duties, most of the observations dealing with the behavior of the larvæ were made at the close of the day, by artificial light—which, as will be seen below, may have had a bearing on the behavior of one of them.

October 28, both larvæ feeding freely. November 1, the smaller within a substantial cocoon, at the bottom of the jar. November 2, had moulted—found the cast shell of the head just outside the cocoon, at one end, and the remainder of the skin just outside at the opposite end—but when the jar was brought closer to the light (gas) in order to verify the observation, the larva hurried out of the cocoon and crawled away. November 4, the same individual in the process of constructing another cocoon; the other—the larger—was still feeding freely. November 7, found the latter encased in a

¹ Identity of species verified by Mr. August Busck of the U. S. Bureau of Entomology, Washington, D. C.